Amendments to the Specification

Filed herewith is a clean copy of the Substitute Specification of the application in compliance with 37 CFR 1.52, 1.121(b)(3), and 1.125.

THE ARTICULATED GLASS BLOCK

Priority of Provisional Patent Application Number 60/429,527, filed November 26, 2002, is claimed.

DESCRIPTION

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention is directed generally to the art of building construction and more specifically to operable glass block windows used in building construction.

2. Description of the Invention Background

Glass blocks are used widely throughout the world especially in Europe. Today innovation has moved glass blocks beyond window replacement industry which for decades its use was exclusively for partitions and windows in buildings of all kinds. Glass block windows offer a variety of advantages over conventional, casement windows. For example, glass block windows have been widely used for protection against vandalism or break-ins. Glass block windows also offer protection against the elements, especially high winds. Traditional windows are easily compromised by projectiles aloft due to high winds. Because glass block windows are comprised of a plurality of glass blocks interconnected to form a wall, during high wind events, it is possible for a projectile to compromise one block without affecting the surrounding blocks.

Glass block windows may be constructed using cement or silicon permanently connecting a number of glass blocks together to form a panel of an appropriate size for the desired opening. The panel of blocks are joined using the like to the opening. It is precisely because of that rigid, permanent, panel construction that many of the above-identified advantages are possible. It is because of that permanently fixed attachment of the panel to the surrounding structure that glass block windows suffer from a number of disadvantages.

Due to a fixed glass block window not opening a glass block window, fire codes may prohibit their use particularly when there is only one window in a room and no other safe fire escape is available as proscribed by law. Additionally, the inability to open a glass block window it obstructs natural airflow from outside to the inside. Although vents can be installed in a glass block window, they interfere with the aesthetic value of the glass block window. Glass block windows are constructed using cement or silicon permanently connecting a number of glass blocks together to form a panel making it difficult to replace a broken block. Technological advancements in the window industry have fostered more energy efficient window systems. The basic design of glass block windows has not changed for decades. Finally, because of the fixed attachment of the panel to the surrounding structure, it is impossible to clean the outside of the glass block window from the interior of the structure.

Thus, the need exists for a glass block window, which is capable of functioning as a traditional operable window while retaining the desirable features of a glass block window.

This device like Application No. 20020096266 and Patent No. 5,675,948 will use a vent that will be introduced to the network in order to allow ventilation. However, unlike these two devices they will not be a part of fixed window assembly they can be removed. Like published patent application No, 2001/0002525 and patent No. 5,511,352 the glass blocks themselves will allow movement to provide an opening for ventilation. However, in both of these models, the assemblies are very heavy and hard for operators to use. They place the weight of the entire assembly on hinges placed on

the sides or side of the window. My design like Patent 5,511,352 makes available the entire window opening for use unlike 5,675,948 that limits airflow to a vent in the sides of two glass blocks. My design is superior to both designs in that it uses basic physical principles to its benefit.

SUMMARY OF THE INVENTION

A functional glass block window comprised of glass blocks joined in symmetry within a framework of sectional sashes that join mechanically to form one integral panel that is of an appropriate size for the desired opening.

In an embodiment of the invention the articulated glass block window system provides the user the flexibility of a casement window system. Using sliding arms mounted perpendicular to load-bearing walls, extends the wall's ability to hold up or leverage the weight of the blocks and provide lateral motion. The user's only task is to collapse the support at the side of the column closest to the windowsill, push the column toward the collapsed support in order to create enough separation to rotate the column to the side, and then push and turn in sequence the columns toward the windowsill creating an opening in the center of the opening.

An embodiment of the invention includes glass blocks assembled in distinct and a uniform subset of columns. The columns or sectional sash units are distinct individual systems of connected blocks. Columns can vary in composition and size but one thing remains constant whether upright or sideways because most glass blocks are square they form rectangularly. An embodiment of the invention has a feature that the columns or rows are supported entirely by retractable arm/slide cantilevers. The cantilevers are anchored to load-bearing structure in order to offset the weight of the assembly. However, it will be clear to those of ordinary skill in the art that the present invention could be embodied in other types of window using this basic element as their underpinning.

One embodiment would place sectional sash units suspended between a tandem of telescoping cantilevers. The cantilevers will be mounted on a load-bearing wall within a cabinet or pocket within the wall adjacent to the window. The cantilever extends from the cabinet to the opening. The door to the cabinet is opened and a door that serves as an opening jamb is unlocked and opened into the cabinet or wall pocket. The sectional suspended between the telescopic or slide cantilevers are pushed toward the pocket. The sectional units are turned sideways and forced into the pocket, collapsed one on another. The jamb is then closed and an opening is revealed A second design would mount the cantilevers to the mouth of the opening to either side to side or top and bottom. A means to rotate will be incorporated in most designs joined between the cantilevers and the sectional units. The means to rotate will allow the unit to rotate up to 90 degrees. The user in this would pull the key sectional unit toward them clearing of the sweep edge or jamb. The sectional units rotate the unit sideways 90 degrees. Then one pushes the unit back in place. The other sectional units move linearly along a single plane to the side or open down. As the sectional units separate, the user turns the sectional unit 90 degrees and to the side one section collapsed to the others inside the windowsill along the jamb.

The present invention is directed to an operable glass block window comprising a window frame sized for insertion into an opening in a structure. The window sash assembly provided is divided into sectional components; each carries a plurality of glass blocks. There are two types of embodiments one that positions a revolving fixture between the sectional components and those that fix the cantilever directly to the sectional sashes. Embodiment one: the sectional sashes move relative to the revolving fixtures and cantilevers. Embodiment two: the sectional sashes move relative to the cantilevers. In one embodiment of the present invention, the sashes are capable of moving to the left and right of the frame into a wall pocket.

The operable glass block window of the present invention provides the advantages of traditional fixed and other operable, glass block windows. That is, the glass block window of the present invention provides protection against vandalism as well as break-ins. The glass block window of the present invention provides excellent protection against hurricanes and other gale force winds. The glass block window of

the present invention is serviceable, replaceable and adaptable and repairable. Glass block windows constructed according to the teachings of the present invention in combination with other technology are more energy efficient and reduce the transmission of noise from the outside to the interior of the building than traditional and other operable windows.

Because the glass block windows of the present invention are capable of being opened, they provide the required fire exits and, thus, their use is not prohibited by fire codes. Because the glass block window can be fully opened to a position where the window sashes move to the side pockets adjacent the opening, maximum ventilation is achieved. Additionally, the ability to open the window to such a degree allows easy access to the outside of the window from the inside of the room for convenient and safe cleaning. Those, and other advantages and benefits of the present invention, will become apparent from the Description of a Preferred Embodiment hereinbelow.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a perspective view of a telescoping support arm for columns of glass blocks and respective thrust bearing portions on which the glass block columns may be mounted, the arm is extended into the window in the closed condition;

Fig. 2 is a perspective view of four glass block columns of a glass block window, the columns mounted on a telescoping support arm in window open condition;

Figs. 3A and 3B are, respectively, perspective views of the telescoping support arm and an example of a thrust bearing plate on which a glass block column is mounted and/or supported;

Fig. 4 is a perspective view of a glass block window with glass blocks mounted on upper and lower telescoping support arms between respective window jams at the lateral sides, the window shown in window closed condition with a strap holding respective columns of glass blocks together;

Figs. 5A through 5J are perspective views of a three column glass block window in respective stages between fully closed and fully open condition and with a cover

protecting the open glass blocks and covering, as by a screen or simply as an opening the space at which the window is open;

Figs. 6A through 6J are perspective views similar to Figs. 5A through 5J with a movable gate in an opening of the windowsill;

Figs 7A through 7D are perspective views of a glass block window in respective stages from closed to open and providing a pocket for storing or hiding of the glass block columns in the wall pocket area and also including a screen in the fully open window;

Figs. 8A through 8G are perspective views of a glass block window with horizontal rows of glass blocks as compared to the vertical columns of glass blocks, the horizontal rows being shown in various stages from open to closed condition and with a window grill to screen in the open window;

Fig. 9 is a perspective view of telescoping support arms to support in horizontal relation a row of glass blocks in horizontal relation;

Figs. 10 and 13 are perspective views of two horizontal rows of glass blocks respective stages of going from closed condition to open condition;

Figs. 14A and 14B are perspective views of horizontal rows of glass block windows in open condition with screens in place of two rows of blocks (Fig. 14A), and with a screen in place of one open row of blocks (Fig. 14B);

Figs. 15A through 15I show how a glass block window with several horizontal rows of glass blocks may be operated from closed to open condition;

Fig. 16 is a perspective view of a support structure for a pair of horizontal rows of glass block windows;

Figs. 17A through 17C are respective mounting structures for horizontal rows of glass block windows;

Fig. 18 is a perspective view of a building structure with glass block windows in various stages of closed and opened condition;

Fig. 19 is a schematic perspective view of several columns of glass block windows and shield plates;

Fig. 20 is a perspective view of a pair of window jams and pocket areas for columns of glass block windows.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to Figs 1-7 and 18-20 the glass block window assembly is comprised of plurality of sectional sash units 6 that join mechanically to form a complete glass block sash panel 3 sealing an opening 29. The glass block sectional units 6 are formed by silicone or cement adhering the blocks together in a line. The unit is mounted to a fixture 5 that allows the sectional unit to move radially and horizontally.

The trunk of track 2 is secured to the window frame 10. In some applications, the cantilever 2 and means interconnect and revolve 4 are joined into one integrated structure 28 that can be connected with other like fixtures until the configuration fits the opening 29 its to be mounted to. This embodiment allows multiple structured axle assemblies to be interlocked to fit any application. The custom configurations are interlocked via a glide plate 20, float medium inter-connector mounted between the hollow box tubes 28, or other like dynamic medium mounted concentrically. The glide plate 20 allows the interlocked tubes 21 to glide independently of one another. Very heavy robust assemblies may use a crossbeam 2 that traverses the opening to increase the load-bearing ability of the assembly. The cantilever 2 is braced across the cross window sill 10. The sash sectional units 6 are supported top and bottom by telescoping assemblies 28 . The alternate embodiments uses telescoping arms 28 mounted vertically parallel to the in side of the window sill. The arms 28 functionally extend outside the window sill in order create the space needed to fold the sectional unit back without striking other sectional units. Alternate embodiments use a concealed-pocket 3 within the wall 24. The pocket(s) 3 is sized to accept the collapsed sectional units 2 is accessed through a partition in the window sill from the pocket concealed in the wall. The closed gate 11 serves as the jamb. So when the arms 2 are fully extended the sectional units snugly rest against the window jamb. The gate 11 hinged to the window frame 10 can be open and closed within the wall pocket 3 to the side of the window sill. The open gate 11 collapsed against the wall or door to the 10 pocket 3. The column 6 moves directionally with the arm 1 into the pocket 3 closest column first. In other embodiments, the sectional units 6 will only exhibit one plane of motion. The face of the column is fixed. The linear modality of the sectional units is limited to that of

the extended and then contracted arm 1. The side to side motion of the individual columns is similar to sliding motion of panels as would make up a curtain.

In other embodiments sandwiched between the column 6 and the cantilever 1, is a means of axis 4 with a limited range of radial motion. As the door partitioning the sill is collapsed the extended arm 1 is folded into the pocket 3. This embodiment functionality mimics the behavior of a curtain sourced from a concealed pocket in the wall. The panels 6 like curtain panels are turned to the side and collapsed one upon another. An access door 20 is mounted to the wall pocket door 17. The wall pocket door 20 reveals the contents of the pocket 3 in the wall 29. The user reverses the procedure rotating the sectional unit 90 degrees and then pushing the sectional unit back in place in the window sill. The gate and door are closed to form a sealed jamb.

The columns 6 as in Figs. 1–7 and 18–20 may be horizontal as in Figs. 8–17.

The user opens both the door to the concealed pocket 20 and the gate that forms the window jamb. The user can then sweeps the unobstructed sectional unit into the pocket. That sectional unit is also turned to the side to make additional room in the pocket. This action is repeated until all the sectional units are collapsed into the wall pocket(s). The opening left behind is filled by a screen 14 in the window sill or left free for egress in the case of an emergency. This application can be used theoretically to form accordion partitioning doors of glass blocks to separate rooms in conference facilities.

This system can be mechanized. A safety screen 14 can be inserted in place of the block panel 6 allowing natural airflow. A security screen 14 comprised of security bars sandwiched between a traditional screen. The simplicity of this system makes it a common sense approach to add functionality to glass block walls.

Though the present invention was shown and described with references to the preferred embodiments, various modifications thereof will be apparent to those skilled in the art and, therefore, it is not intended that the invention be limited to the disclosed

embodiments or details thereof, and departure can be made therefrom within the spirit and scope of the appended claims.

Filed herewith is a marked up copy of the Substitute Specification Application Papers showing deleted portions struck out and showing added portions underlined.

THE ARTICULATED GLASS BLOCK

~~For patenting purposes, this application uses~~Priority of Provisional Patent Application Number 60/429,527~~ and its filing date of~~, filed November 26, 2002~~ to backdate this application. A functional glassblock window comprised of glass blocks join in symmetry within a framework of sectional sashes that join mechanically to form one integral panel that of an appropriate size for the desired opening.~~

~~THE ARTICULATED GLASS BLOCK~~

, is claimed.

DESCRIPTION

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention is directed generally to the art of building construction and more specifically to operable glass block windows used in building construction.

2. Description of the Invention Background

Glass blocks are used widely throughout the world especially in Europe. Today innovation has moved glass blocks beyond window replacement industry which for decades its use was exclusively for partitions and windows in buildings of all kinds. Glass block windows offer a variety of advantages over conventional, casement windows. For example, glass block windows have been widely used for protection against vandalism or break-ins. Glass block windows also offer protection against the

elements, especially high winds. Traditional windows are easily compromised by projectiles ~~a loft~~aloft due to ~~the~~ high winds. Because glass block windows are comprised of a plurality of ~~glassblock~~glass blocks interconnected to form a wall. ~~D~~During high wind events, it is possible for a projectile to compromise one block without ~~effecting~~affecting the surrounding ~~the~~ blocks.

Glass block windows may be constructed using cement or silicon permanently connecting a number of glass blocks together to form a panel of an appropriate size for the desired opening. The panel of blocks are joined using the like to the opening. It is precisely because of that rigid, permanent, panel construction that many of the above-identified advantages are possible. It is because of that permanently fixed attachment of the panel to the surrounding structure that glass block windows suffer from a number of disadvantages.

Due to a fixed glass block window not opening a glass block window, fire codes may prohibit their use particularly when there is only one window in a room and no other safe fire escape is available as proscribed by law. Additionally, the inability to open a glass block window it obstructs natureal airflow from outside to the inside. Although vents can be installed in a glass block window, they interfere with the aesthetic value of the glass block window. Glass block windows are constructed using cement or silicon permanently connecting a number of glass blocks together to form a panel ~~make~~making it difficult to replace a broken block. Technological advancements in the window industry have fostered more energy efficient window systems. The basic design of ~~glassblock~~glass block windows ha~~ve~~s not changed for decades. Finally, because of the fixed attachment of the panel to the surrounding structure, it is impossible to clean the outside of the glass block window from the interior of the structure.

Thus, the need exists for a glass block window, which is capable of functioning as a traditional operable window while retaining the desirable features of a glass block window.

This device like Application No. 20020096266 and ~~p~~Patent No. 5,675,948 will use a vent that will be introduced to the network in order to allow ventilation. However, unlike these two devices they will not be a part of fixed window assembly they can be removed. Like published patent application ~~n~~No, 2001/0002525 and ~~pat:~~patent No. 5,511,352 the glass blocks themselves will allow movement to provide an opening for ventilation. However, in both of these models, the assemblies are very heavy and hard for operators to use. They place the weight of the entire assembly on hinges placed on the sides or side of the window. My design like ~~p~~Patent 5,511,352 makes available the entire window opening for use unlike 5,675,948 that limits airflow to a vent in the ~~size~~sides of two glass blocks. My design is superior to both designs in that it uses basic physical principles to its benefit.

~~The window assembly will be effort free design that provides the user the flexibility of casement window system. Using sliding arms mounted perpendiculars to load bearing walls, extend the wall's ability to hold up or leverage the weight of the blocks and provide lateral motion. The user only task is to collapse the support at the side of the column closest to the windowsill. Push the column toward the collapsed support in order to create enough separation to rotate the column to the side. Then user pushes and turn in sequence the columns toward the windowsill. Creating a opening in the center of the opening.~~

~~THE~~ SUMMARY OF THE INVENTION

~~The Invention consists of~~A functional glass block window comprised of glass blocks joined in symmetry within a framework of sectional sashes that join mechanically to form one integral panel that is of an appropriate size for the desired opening.

In an embodiment of the invention the articulated glass block window system provides the user the flexibility of a casement window system. Using sliding arms mounted perpendicular to load-bearing walls, extends the wall's ability to hold up or leverage the weight of the blocks and provide lateral motion. The user's only task is to

collapse the support at the side of the column closest to the windowsill, push the column toward the collapsed support in order to create enough separation to rotate the column to the side, and then push and turn in sequence the columns toward the windowsill creating an opening in the center of the opening.

An embodiment of the invention includes glass blocks assembled in distinct and a uniform subset of columns. The columns or sectional sash units are distinct individual systems of connected blocks. Columns can vary in composition and size but one thing remains constant wihether upright or ~~side-ways~~sideways because most glass blocks are square they form rectangular;ly. ~~T~~An embodiment of the invention has ~~one essential features one is~~a feature that the columns or rows are supported entirely by ~~a~~ retractable arm/slide cantilevers. The cantilevers are anchored to load-bearing structure in order to offset the weight of the assembly. However, it will be clear to those of ordinary skill in the art that the present invention could be embodied in other types of window using this basic element as their ~~under pinning~~underpinning.

One embodiment would placed sectional sash units suspended between a tandem of telescoping cantilever-s. The cantilevers will be mounted on a load-bearing wall within a cabinet or pocket within the wall adjacent to the window. The cantilever extends from the cabinet to the opening. The door to the cabinet is opened and a door that serves as an opening jamb is unlocked and opened into the cabinet or wall pocket. The sectional suspended between the telescopic or slide cantilevers are pushed towards the pocket. The sectional units are turn~~-side ways~~ed sideways and forced into the pocket, collapsed one on another. The jamb is then closed and an opening is revealed A second design would mount the cantilevers to the mouth of the opening to either side to side or top and bottom. A means to rotate will be incorporated in most designs joined between the cantilevers and the sectional units. The means to rotate will allow the unit to rotate up to 90 degrees. The user in this would pull the key sectional unit toward ~~themselves~~them clearing of the sweep edge or jamb. The sectional units rotate the unit sideways 90 degrees. Then one pushes the unit back in place. The other sectional units move linearly along a single plane to the side or open down. ~~a~~As

the sectional units separate, the user turns the sectional unit 90 degrees and to the side one section collapsed to the others inside the windowsill along the jamb.

The present invention is directed to an operable glass block window comprising a window frame sized for insertion into an opening in a structure. The window sash assembly provided is divided into sectional components; each carries a plurality of glass blocks. ~~Their~~There are two types of embodiments one that positions a revolving fixture between the sectional components and those that fix the cantilever directly to the sectional sashes. Embodiments one: the sectional sashes ~~a~~ move relative to the revolving fixtures and cantilevers~~.~~. Embodiment two: the sectional sashes move relative to the cantilevers.~~:~~ In one embodiment of the present invention, the sashes are capable of moving to the left and right of the frame into a wall pocket.

The operable glass block window of the present invention provides the advantages of traditional fixed and other operable, glass block windows. That is, the glass block window of the present invention provides protection against vandalism as well as break-ins. The glass ~~block-window~~block window of the present invention provides excellent protection against hurricanes and other gale force winds. The glass ~~block-window~~block window of the present invention is serviceable~~-~~, replaceable and adaptable and repairable. Glass block windows constructed according to the teachings of the present invention in combination with other technology ~~is~~are more energy efficient and reduce the transmission of noise from the outside to the interior of the building than traditional and other operable windows.~~:~~

Because the glass block windows of the present invention are capable of being opened, they provide the required fire exits and, thus, their use is not prohibited by fire codes. Because the glass block window can be fully opened to a position where the window sashes move to the side pockets adjacent the opening, maximum ventilation is achieved. Additionally, the ability to open the window to such a degree allows easy access to the outside of the window from the inside of the room for convenient and safe cleaning. Those, and other advantages and benefits of the present invention, will

become apparent from the Description of a Preferred Embodiment ~~here in below~~hereinbelow.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 ~~shows a the perspective~~is a perspective view of a telescoping support arm for columns of glass blocks and respective thrust bearing portions on which the glass block columns may be mounted, the arm is extended into the window in the closed condition;

Fig. 2 is a perspective view of four glass block columns of a glass block ~~fig. 2 shows~~window, the columns mounted on a telescoping support arm in window open condition;

Figs. 3A and 3B are, respectively, perspective views of the telescoping support arm and an example of a thrust bearing plate on which a glass block column is mounted and/or supported;

Fig. 4 is a perspective view of a ~~column of glassblock Fig. 3 a rendering of an adaptable integrated telescopic arm and lazy suzan Fig 4 Shows the glide plate Fig. 5 illustrate the strap holding the column of~~ glass block window with glass blocks mounted on upper and lower telescoping support arms between respective window jams at the lateral sides, the window shown in window closed condition with a strap holding respective columns of glass blocks together~~. Fig. 6 shows the gate in the windowsill. Fig. 7 illustrates a type of gate locking mechanism. Fig. 8 shows the wall pocket Fig 9 shows the access panel to the windowsill and wall pocket .Fig. 9 shows a type of locking mechanism for the access panel door. Fig. 10 shows how telescopic arm is mounted cross to wall bearing member for the window. Fig. 11 illustrates the window closed Fig. 12 illustrates the gate incorporated into the windowsill opening Fig. 13 illustrates the arm retraction into wall pocket via a open access panel and windowsill gate Fig. 14 illustrates the columns using lazy suzan turning to on side. Fig. 15 illustrates all the columns collapsed upon one another within~~;

Figs. 5A through 5J are perspective views of a three column glass block window in respective stages between fully closed and fully open condition and with a cover protecting the open glass blocks and covering, as by a screen or simply as an opening the space at which the window is open;

Figs. 6A through 6J are perspective views similar to Figs. 5A through 5J with a movable gate in an opening of the windowsill;

Figs 7A through 7D are perspective views of a glass block window in respective stages from closed to open and providing a pocket for storing or hiding of the glass block columns in the wall pocket. ~~Fig. 16 shows the window gate closed to the pocket and a screen replacing the glass blocks~~ area and also including a screen in the fully open window;

Figs. 8A through 8G are perspective views of a glass block window with horizontal rows of glass blocks as compared to the vertical columns of glass blocks, the horizontal rows being shown in various stages from open to closed condition and with a window grill to screen in the open window;

Fig. 9 is a perspective view of telescoping support arms to support in horizontal relation a row of glass blocks in horizontal relation;

Figs. 10 and 13 are perspective views of two horizontal rows of glass blocks respective stages of going from closed condition to open condition;

Figs. 14A and 14B are perspective views of horizontal rows of glass block windows in open condition with screens in place of two rows of blocks (Fig. 14A), and with a screen in place of one open row of blocks (Fig. 14B);

Figs. 15A through 15I show how a glass block window with several horizontal rows of glass blocks may be operated from closed to open condition;

Fig. 16 is a perspective view of a support structure for a pair of horizontal rows of glass block windows;

Figs. 17A through 17C are respective mounting structures for horizontal rows of glass block windows;

Fig. 18 is a perspective view of a building structure with glass block windows in various stages of closed and opened condition;

Fig. 19 is a schematic perspective view of several columns of glass block windows and shield plates;

Fig. 20 is a perspective view of a pair of window jams and pocket areas for columns of glass block windows.

DESCRIPTION OF THE PREFERRED EMBODIMENT

~~T~~Referring to Figs 1-7 and 18-20 the glass block window assembly is comprised of plurality of sectionals sash units 6 that join mechanically to form a complete ~~glassblock~~glass block sash panel 3 sealing an opening 29. The glass block sectional ~~of a sash can be constructed of~~units 6 are formed by silicone or cement ~~sandwiched between the blocks that are capped with a rigid mounting fixture. The means to revolve devices are cantilevered between a tandem of two parallel cantilevers that project~~ adhering the blocks together in a line. The unit is mounted to a fixture 5 that allows the sectional unit to move radially and horizontally.

The trunk of ~~the means to project is recessed or collapsible mounted to a support wall/member.~~ track 2 is secured to the window frame 10. In some applications, the ~~cantilever~~cantilever 2 and means ~~to~~interconnect and revolve 4 are joined into one integrated structure 28 that can be ~~inter-locked~~connected with other like ~~fixtures that incorporates smaller into greater and greater into even greater is repeated~~fixtures until the configuration fits the opening 29 its to be mounted to. This ~~design~~ embodiment allows multiple ~~units of fixture~~ structured axle assemblies to be interlocked to fit any application. The custom configurations are interlocked via a glide plate 20, float medium inter-connector mounted between the hollow box tubes 28, or other like dynamic medium mounted concentrically. The glide plate 20 allows the interlocked tubes 21 to glide independently of one another. Very heavy robust assemblies may use a crossbeam 2 that traverses the opening to increase the load-bearing ability of the assembly. The cantilever 2 is ~~ferried~~braced across the cross ~~member~~window sill 10. The sash sectional ~~will be mounted between a~~ units 6 are supported top and bottom by telescoping assemblies. ~~The assembly may use two opposing units mounted on either~~ 28 . The alternate embodiments uses telescoping arms 28 mounted vertically parallel to the in side of the window sill. ~~The recessed arms extend out from a pocket within that wall. The pocket~~The arms 28 functionally extend outside the window sill in order

create the space needed to fold the sectional unit back without striking other sectional units. Alternate embodiments use a concealed–pocket 3 within the wall 24. The pocket(s) 3 is sized to accept the collapsed sectional units. ~~The gate that serves as the opening's jamb is found unmolested between the upper and lower arm~~ 2 is accessed through a partition in the window sill from the pocket concealed in the wall. The closed gate 11 serves as the ~~opening's~~ jamb. So when the arm ~~is~~s 2 are fully ~~extends and~~extended the ~~sectionals are~~sectional units snugly rest against the window jamb. The gate 11 hinged to the ~~outside wall~~ window frame 10 can be open and closed ~~by a~~ within the wall pocket 3 to the ~~pocket away from~~side of the ~~column~~window sill. The open gate 11 collapsed against the ~~outside~~ wall ~~of~~or door to the ~~pocket serves as a gateway to the pocket. The columns moving along with the arm is pushed into the pocket~~ 10 pocket 3. The column 6 moves directionally with the arm 1 into the pocket 3 closest column first. In ~~some~~other embodiments, the ~~columns~~sectional units 6 will only exhibit ~~only~~ one plane of motion. The face of the column is fixed. The ~~motion~~linear modality of the ~~column~~sectional units is limited to that of the extended and then contracted arm 1. The side to side motion of the individual columns is similar to sliding motion of ~~panel's~~panels as would make up a curtain.

In other embodiments sandwiched between the column 6 and the cantilever ~~is a rotational base that revolves clockwise and counterclockwise. Space is created between the contacted and extended arm. This assembly design allows columns to fill the pocket side ways decreases the depth needed to house the column.~~1, is a means of axis 4 with a limited range of radial motion. As the door partitioning the sill is collapsed the extended arm 1 is folded into the pocket 3. This embodiment ~~closely~~ functionality mimics the behavior of a curtain. ~~The panel's folds one on to another allowing compression surface area.~~ sourced from a concealed pocket in the wall. The panels 6 like curtain panels are turned to the side and collapsed one upon another. An access door 20 is mounted ~~perpendicular to the windowsill door that door is design to reveal area just after the windowsill door and the entire pockets. The open access panel to allow total accesses to all sectionals and window jamb gates. The user can push the sectionals, closest column in and farthest out. Once the arms are extended and the sectional s situated into position, the shut gate then becomes the jamb. This~~

~~action is repeated on the other side, in this application the lead edges of the outermost columns meet in the middle to form a kinetic seal~~ to the wall pocket door 17. The wall pocket door 20 reveals the contents of the pocket 3 in the wall 29. The user reverses the procedure rotating the sectional unit 90 degrees and then pushing the sectional unit back in place in the window sill. The gate and door are closed to form a sealed jamb.

The columns 6 as in Figs. 1–7 and 18–20 may be horizontal as in Figs. 8–17.

The user opens ~~the access panel then they open the gates to the~~ both the door to the concealed pocket 20 and the gate that forms the window jamb. The user ~~then moves the columns closest to the open gate toward the pocket while turning the sectionals 90 degrees to a stop~~can then sweeps the unobstructed sectional unit into the pocket. That sectional unit is also turned to the side to make additional room in the pocket. This action is repeated until all the ~~sectionals~~sectional units are collapsed into ~~their adjacent~~the wall ~~pockets~~pocket(s). ~~An opening is then revealed making way for a screen or~~The opening left behind is filled by a screen 14 in the window sill or left free for egress in the case of an emergency. This ~~same~~ application can be used theoretically to form accordion ~~doors made glass blocks.~~

partitioning doors of glass blocks to separate rooms in conference facilities.

This system can be mechanized. A safety screen 14 can be inserted in place of the block panel 6 allowing natural airflow. ~~The~~A security screen ~~is~~14 comprised of security bars sandwiched between a traditional screen. The simplicity of this system makes it ~~is~~ a common sense approach to add functionality to glass block walls.